

June 18, 2020

OPP Docket, U.S. EPA Docket Center (EPA/DC), (28221T) 1200 Pennsylvania Ave. NW Washington, DC 20460-0001

# RE: Comments on the Proposed Interim Registration Review Decisions for the Neonicotinoid Insecticide Class

(Docket Numbers EPA-HQ-OPP-2008-0844; EPA-HQ-OPP-2011-0581; EPA-HQ-OPP-2011-0865; EPA-HQ-OPP-2012-0329; and EPA-HQ-OPP-2011-0920)

The Xerces Society for Invertebrate Conservation (Xerces) is submitting these additional comments to EPA in light of new information on treated seed disposal. These comments are in addition to our extensive comments dated May 4, 2020.

Xerces is an international nonprofit organization that protects wildlife through the conservation of invertebrates and their habitat. Xerces has extensive knowledge of the impacts of neonicotinoids on pollinators and other invertebrate species based on our research and literature reviews. It is with this expertise that we offer comments.

## EPA does not adequately regulate disposal of treated seed

Since EPA does not regulate pesticide-treated seed as a pesticide, there is very little information available about planting of treated seed, though what we do know suggests that treated seed is widely used and negatively impacts ecosystems (Douglas et al. 2020; Hitaj et al. 2020). There is even less information available about how excess treated seed is disposed, and what quantities are disposed rather than planted. Routes of treated seed disposal have not been adequately considered by EPA to ensure that 'disposed' treated seed is not contaminating the environment.

In EPA's Proposed Interim Decisions, the agency discusses proper disposal of neonicotinoid-treated seed but does not consider harms that can occur from treated seed once it is 'disposed'. EPA suggests methods for disposal including planting or burying excess treated seed away from waterways, but does not require specific disposal methods. The agency refers to best management practices from a trade group for disposal recommendations (ASTA 2020). These recommendations include disposal facilities like waste management facilities, power plants, cement kilns, ethanol plants, and municipal landfills. It states that these facilities will need to have an EPA permit to accept pesticide treated seed, but does not go into further detail about required permitting. EPA must consider the impacts of all treated seed disposal pathways.

Ethanol facilities present concerning exposure routes

Recent information that has come to our attention sheds light on particular concerns around using excess seed in ethanol production. Anecdotal evidence from Nebraska suggests that ethanol plants receiving treated seed for use in fermentation are contaminating nearby waterways and ecosystems. Holding ponds and by-products of ethanol production can contain extreme levels of neonicotinoids and other seed treatment products. Holding pond samples from one ethanol plant contained 44.7 to 58,400 ppb of clothianidin, 0 to 108 ppb of imidacloprid, and 26.0 to 35,400 ppb of thiamethoxam. Samples of the wet cake ethanol byproducts contained 112,000 ppb of clothianidin, 485 ppb of imidacloprid, and 30,500 ppb of thiamethoxam (see Appendix A). Wastewater from this facility is discharged into local waterways or applied to neighboring fields, and solids have been land-applied in the area. Reports of colored dust settling on nearby properties from the unloading and handling of treated seed suggests dust-off concerns similar to, and possibly more severe than, those from the planting of treated seed. There may also be occupational health concerns from handling treated seed in ethanol production facilities that have not been addressed by EPA. Runoff and discharge from storage ponds and application of contaminated ethanol byproducts (wet cakes, etc.) as a soil amendment appears to be leading to excessive levels of neonicotinoids in local waterways and bee kills.

Insecticide treated seed labels state that 'excess treated seed may be used for ethanol production only if (1) by-products are not used for livestock feed and (2) no measurable residues of pesticide remain in ethanol by-products that are used in agronomic practice.' Despite this statement, it is not clear that there is robust tracking or enforcement of these restrictions for disposal of treated seed in ethanol plants.

Continuing to exempt neonicotinoid treated seed from pesticide regulation via the treated article provision is leading to unreasonable adverse effects on the environment through both the use and disposal of treated seed. EPA must consider the impacts of disposal of excess treated seed as the agency evaluates the environmental effects of neonicotinoid use. Thank you for considering these comments and for further investigating proper disposal of unplanted treated seed.

Sincerely,

Sarah Hoyle Pesticide Program Specialist

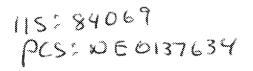
Aimee Code Pesticide Program Director

## References:

- American Seed Trade Association [ASTA]. The Guide to Seed Treatment Stewardship. Available at: <a href="https://seed-treatment-guide.com/wp-content/uploads/2014/12/ASTA-Seed-Guide-Farmers.pdf">https://seed-treatment-guide.com/wp-content/uploads/2014/12/ASTA-Seed-Guide-Farmers.pdf</a>. Accessed June 16, 2020.
- Douglas, M., D. Sponsler, E. Lonsdorf, and C. Grozinger. 2020. County-level analysis reveals a rapidly shifting landscape of insecticide hazard to honey bees (*Apis mellifera*) on US farmland. *Scientific Reports* 10: 797.
- Hitaj, C., D. Smith, A. Code, S. Weschler, P. Esker, and M. Douglas. 2020. Sowing Uncertainty: What We Do and Don't Know about the Planting of Pesticide-Treated Seed. *Bioscience* 70(5): 390-403.

# Appendix A.

AltEn Ethanol Plant Waste Lagoon and Wet Cake Byproduct Sampling Analysis Alten



10/8/2019 m-

# Sample Collection Field Sheet US EPA Region 7 Kansas City, KS

ASR Number: (	3209	Sample Numi	ber: 4	QC Co	de: Matr	ix: Solid	Tag ID:	8209-4
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		Enforcement						
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Sample Comments

(N/A)

Sample Collected By: NDEQ



### Performed By:

South Dakota Agricultural Laboratories 1335 Western Avenue Brookings, South Dakota 57006 Phone. 605-692-7325 E-Mail: regina wixon@sdaglabs.com

### Collected By:

EA Eng Science and Technology 221 Sun Valley Blvd Suite D Accounts Payable, Dan Bigbee Lincoln, NE 68528 Phone: 402-817-7612

Phone: 402-817-7612 E-Mail: dbigbee@eaest.com

Report Date: 2019-04-25

Final Report

# South Dakota Agricultural Laboratories has examined the sample of

Limfinite Package Id:

20190415-002

Lab Sample Id:

19PE001995

Customer Sample Id:

West Lagoon

Sample Description:

Liquid

Date Collected:

2019-04-08

Date Received :

2019-04-15

ANALYTE	RESULT
Acetamprid	ND ppb
Azoxystrobin	99.3 ppb
Bifenthrin	ND ppb
Brassinazole	ND ppb
Chlorpyrifos-ethyl	ND ppb
Chlorpyrifos-methyl	ND ppb
Clothianidin	58400 ppb
Cyfluthrin	NO ppb
Cypermethrin	ND ppb
Cyproconazole	ND ppb
Deltamethrin	<5 ppb
Dimoxystrobin	NO ppb
Epoxiconazole	ND ppb
Fluconazole	ND ppb
Glufosinate	ND ppb
Glyphosate	124 ppb
Imidacloprid	108 ppb
Isavuconazole	NO ppb
Lambda-cyhalothrin	ND ppb
Metconazole	ND ppb
Orysastrobin	ND ppb
Permethrin	NO ppb
Posaconazole	ND ppb
Propiconazole	ND ppb
Pyraclostrobin	ND ppb
Ravuconazole	ND ppb
Tebuconazole	213 ppb
Thiabendazole	8450 ppb
Thiacloprid	ND ppb
Thiamethoxam	35400 ppb

Trifloxystrobin58.2 ppbUniconazoleND ppbVoriconazoleND ppb

Comments:

Page 2 of 4

Pace Analytical

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Submitted by the customer:

### Performed By:

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Report Date: 2019-04-29

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Phone: 402-817-7612

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Accounts Payable, Dan Bigbee

**Final Report** 

# South Dakota Agricultural Laboratories has examined the sample of

20190415-002 Limfinite Package Id:

19PE001996 Lab Sample Id:

Customer Sample ld: Overflow Lagoon

Sample Description: Liquid

2019-04-08 Date Collected: 2019-04-15 Date Received :

ANALYTE RESULT Acetamprid ND ppb Azoxystrobin 581 ppb Bifenthrin ND ppb Brassinazole ND ppb Chlorpyrifos-ethyl ND ppb Chlorpyrifos-methyl ND ppb Clothianidin 44.7 ppb Cyfluthrin ND ppb Cypermethrin ND ppb Cyproconazole ND ppb Deltamethrin <5 ppb Dimoxystrobin ND ppb ND ppb Epoxiconazole Fluconazole ND ppb Glufosinate 86.7 ppb Glyphosate 3850 ppb Imidacloprid ND ppb Isavuconazole ND ppb Lambda-cyhalothrin <5 ppb ND ppb Metconazole Orysastrobin ND ppb Permethrin ND opb Posaconazole ND ppb Propiconazole 726 ppb Pyraclostrobin ND ppb Ravuconazole ND ppb Tebuconazole 2330 ppb Thiabendazole 39700 ppb Thiacloprid ND ppb Thiamethoxam 26.0 ppb

Triffoxystrobin 737 ppb
Uniconazole ND ppb
Voriconazole ND ppb

Comments:

ND: Not Detected

### Performed By:

Date Received :

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E-Mail: regina.wixon@sdaglabs.com

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Phone: 402-817-7612 E-Mail: dbigbee@eaest.com

Report Date: 2019-04-25 Final Report

# South Dakota Agricultural Laboratories has examined the sample of

Limfinite Package Id: 20190415-002

Lab Sample ld: 19PE001997

Customer Sample Id: Wet Cake

Sample Description : Cake

Date Collected: 2019-04-08

ANALYTE RESULT

Acetamprid ND ppb Azoxystrobin 1430 ppb Bifenthrin ND ppb Brassinazole ND ppb Chlorpyrifos-ethyl ND ppb Chlorpyrifos-methyl ND ppb 112000 ppb Clothianidin Cyfluthrin ND ppb Cypermethrin ND ppb Cyproconazole ND ppb Deltamethrin ND ppb Dimoxystrobin ND ppb Epoxiconazole ND ppb Fluconazole ND ppb Glufosinate ND ppb Glyphosate ND ppb Imidacloprid 485 ppb ND ppb Isavuconazole Lambda-cyhalothrin ND ppb Metconazole ND ppb Orysastrobin ND ppb Permethrin ND ppb Posaconazole ND ppb Propiconazole ND ppb Pyraclostrobin ND ppb Ravuconazole ND ppb Tebuconazole 10400 ppb Thiabendazole 55600 ppb ND ppb Thiacloprid Thiamethoxam 30500 ppb

2019-04-15

Trifloxystrobin 1750 ppb Uniconazole ND ppb Voriconazole ND ppb

#### Comments:

ND: Not Delected